SEQUENCE LISTING

<110> Institut Pasteur
Centre National de la Recherche Scientifique

<120> NOVEL SYNTHETIC PEPTIDE VACCINES FOR HIV: THE CBD EPITOPE AS AN EFFECTIVE IMMUNOGEN TO ELICIT BROADLY NEUTRALIZING ANTIBODIES AGAINST HIV

<130> B5602 - INSTITUT PASTEUR & CNRS

<140> EPXXXXXXXXX
<141> 2003-04-11

<160> 21

<170> PatentIn Ver. 2.1

<210> 1
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: caveolin binding motif in which Xaa is any amino acid

<400> 1
Trp Xaa Xaa Xaa Xaa Trp Xaa Xaa Trp
1 5

<210> 2
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: caveolin binding domain corresponding to amino acids 619 to 633 of HIV-1

<400> 2
Leu Glu Gln Ile Trp Asn Asn Met Thr Trp Met Gln Trp Asp Lys
1 5 10 15

<210> 3
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: caveolin
binding domain corresponding to amino acids 662 to
676 of HIV-2

<400> 3
Leu Thr Pro Asp Trp Asn Asn Met Thr Trp Gln Glu Trp Glu Arg
1 5 10 15

<210> 4
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: caveolin
binding domain corresponding to amino acids 604 to
633 of HIV-1

<400> 4
Cys Thr Thr Ala Val Pro Trp Asn Ala Ser Trp Ser Asn Lys Ser Leu
1 5 10 15

Glu Gln Ile Trp Asn Asn Met Thr Trp Met Gln Trp Asp Lys
20 25 30

<210> 5
<211> 26
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: caveolin
binding domain corresponding to amino acids 651 to
676 of HIV-1

<400> 5
Cys His Thr Thr Val Pro Trp Pro Asn Asp Ser Leu Thr Pro Asp Trp

1 5 10 15

Asn Asn Met Thr Trp Met Gln Trp Asp Lys
20 25

<210> 6
<211> 26
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: caveolin binding domain corresponding to amino acids 651 to 676 of HIV-2

<400> 6
Cys His Thr Thr Val Pro Trp Pro Asn Asp Ser Leu Thr Pro Asp Trp
1 5 10 15

Asn Asn Met Thr Trp Gln Glu Trp Glu Arg
20 25

<210> 7
<211> 30
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: caveolin binding domain corresponding to amino acids 604 to 676 of HIV-1

<400> 7
Cys Thr Thr Ala Val Pro Trp Asn Ala Ser Trp Ser Asn Lys Ser Leu
1 5 10 15

Glu Gln Ile Trp Asn Asn Met Thr Trp Gln Glu Trp Glu Arg
20 25 30

<210> 8
<211> 9
<212> PRT

<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Caveolin
binding motif

<400> 8
Trp Asn Asn Met Thr Trp Met Glu Trp
1 5

<210> 9
<211> 9
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Caveolin
binding motif

<400> 9
Trp Asn Asn Met Thr Trp Gln Glu Trp
1 5

<210> 10
<211> 20
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: C-20 peptide
scaffolding domain of caveolin from amino acids 82
to 101 of caveolin-1

<400> 10
Asp Gly Ile Trp Lys Ala Ser Phe Thr Thr Phe Thr Val Thr Lys Tyr
1 5 10 15

Trp Phe Tyr Arg
20

<210> 11
<211> 17

<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Variant of SEQ ID No. 2 in which X is any amino acid, n is 0 to 20 and m is 0 to 20

<400> 11
Xaa Leu Glu Gln Ile Trp Asn Asn Met Thr Trp Met Gln Trp Asp Lys
1 5 10 15

Xaa

<210> 12
<211> 17
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Variant of SEQ ID No. 3 in which X is any amino acid, n is 0 to 20 and m is 0 to 20

<400> 12
Xaa Leu Thr Pro Asp Trp Asn Asn Met Thr Trp Gln Glu Trp Glu Arg
1 5 10 15

Xaa

<210> 13
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Variant of SEQ ID No. 2 in which Xaa is Trp, Phe or Tyr

<400> 13
Leu Glu Gln Ile Xaa Asn Asn Met Thr Xaa Met Gln Xaa Asp Lys
1 5 10 15

<210> 14
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Variant of SEQ ID No. 3 in which Xaa is Trp, Phe or Tyr

<400> 14
Leu Thr Pro Asp Xaa Asn Asn Met Thr Xaa Gln Glu Xaa Glu Arg
1 5 10 15

<210> 15
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Variant of SEQ ID No 2 in which Xaa is Ala, Gly, Val, Leu, Ile, Phe, Trp, Tyr, Met, Cys, Ser, Thr, Gln, Glu, Asp, Lys, Arg, His or Pro

<400> 15
Leu Glu Gln Ile Trp Asn Xaa Met Thr Trp Met Gln Trp Asp Lys
1 5 10 15

<210> 16
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Variant of SEQ ID No. 2 in which Xaa is Ala, Gly, Val, Leu, Ile, Phe, Trp, Tyr, Met, Cys, Gln, Asp, Glu, Lys, Arg, His or Pro

<400> 16
Leu Glu Gln Ile Trp Asn Asn Met Xaa Trp Met Gln Trp Asp Lys

1 5 10 15

<210> 17
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Variant of SEQ ID No. 3 in which Xaa is Ala, Gly, Val, Leu, Ile, Phe, Trp, Tyr, Met, Cys, Ser Thr, Gln, Asp, Glu, Lys, Arg, His or Pro

<400> 17
Leu Thr Pro Asp Trp Asn Xaa Met Thr Trp Gln Glu Trp Glu Arg
1 5 10 15

<210> 18
<211> 15
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Variant of SEQ ID No. 3 in which Xaa is Ala, Gly, Val, Leu, Ile, Phe, Trp, Tyr, Met, Cys, Gln, Asp, Glu, Lys, Arg, His or Pro

<400> 18
Leu Thr Pro Asp Trp Asn Asn Met Xaa Trp Gln Glu Trp Glu Arg
1 5 10 15

<210> 19
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleic acid of SEQ ID No. 2

<400> 19

ctggagcaga tctggaacaa catgacctgg atgcagtggg acaag 45

<210> 20
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleid Acid
of SEQ ID No. 2

<400> 20
ctggaacaga tttggaataa catgacctgg atggagtggg acaga 45

<210> 21
<211> 45
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Nucleid Acid
of SEQ ID No. 2

<400> 21
ctggaacaga tttggaataa catgacctgg atgcagtggg acaaa 45